

## Pender County Natural Area Inventory

### BEAR GARDEN Significant Natural Heritage Area

**Site significance:** regional  
**Quadrangle:** Maple Hill SW

**Size:** 3710 acres  
**Ownership:** private

**SIGNIFICANT FEATURES:** Bear Garden supports good examples of the Wet Pine Flatwoods Wet Spodosol Variant, Pine/Scrub Oak Sandhill Mixed Oak Variant, Pond Pine Woodland, and High Pocosin natural communities, and an unusual example of the Mesic Pine Flatwoods Coastal Plain Variant. The Pine/Scrub Oak Sandhill and Mesic Pine Flatwoods communities are regionally uncommon. The site also supports populations for three rare plants, including the Federal Species of Concern and State Endangered Carolina goldenrod (*Solidago pulchra*).

**LANDSCAPE RELATIONSHIPS:** This site is located in eastern Pender County along the north side of Holly Shelter Game Land and the Holly Shelter Macrosite. It lies in the central-western portion of one of the most important natural ecosystems on the Atlantic Coast: the Camp Lejeune/Holly Shelter Megasite. The southern boundary of the site is contiguous with Holly Shelter Game Land, and it is directly connected northeastward to highly significant savanna, flatwoods, and pocosin habitat, and northward by timberlands and a narrow stream floodplain landscape connection to Angola Bay Game Land. Westward, it is connected by timberlands to Southwest Ridge Savanna.

**SITE DESCRIPTION:** Bear Garden is a complex of large Carolina bays, wetland flats, and elongate upland ridges on an interstream terrace. Carolina bays are elliptical wetland basins surrounded by arcuate, usually dry sand ridges called bay rims. The wetland flats and Carolina bay basins support two pocosin communities: Pond Pine Woodland and High Pocosin. The upland ridges support three longleaf pine communities: Wet Pine Flatwoods Wet Spodosol Variant, Mesic Pine Flatwoods Coastal Plain Variant, and Pine/Scrub Oak Sandhill Mixed Oak Variant. The majority of the upland ridges are bay rims surrounding the large Carolina bays, but others are isolated upland rises within large areas of pocosin habitat. Some of these uplands have been converted to pine plantation, but the majority are dominated by natural communities.

Wet Pine Flatwoods Wet Spodosol Variant occurs on wet sandy spodosol soil that typically dries out later in the growing season. Canopy conditions are variable, ranging from cleared or open to moderately dense. Slash pine (*Pinus elliottii*) and longleaf pine (*P. palustris*) are variously dominant, with longleaf pine most common on isolated ridges. The sparse to moderate and often patchy shrub layer is dominated by dwarf huckleberry (*Gaylussacia dumosa*) and inkberry (*Ilex glabra*), with staggerbush (*Lyonia mariana*) a patch dominant, and dwarf indigo-bush (*Amorpha herbacea*), persimmon (*Diospyros virginiana*), and southern blueberry (*Vaccinium tenellum*) prominent. The dense to moderate ground layer is dominated by wiregrass (*Aristida stricta*) and creeping blueberry (*Vaccinium crassifolium*), with bracken (*Pteridium aquilinum* var. *pseudocaudatum*) and deer's-tongue (*Carphephorus odoratissimus*) prominent. Although slash pine is an introduced tree in North Carolina, it responds well to controlled burning, and the structure and composition of slash pine-dominated flatwoods habitat at Bear Garden are otherwise very similar to the sites dominated by longleaf pine.